

Circular Textile Cirkulär Textil

7.5 credits

Ladok Code: AT1CI1

Version: 5.0

Established by: Committee for Education in Technology 2019-12-09

Valid from: Spring 2020

Education Cycle: First cycle

Main Field of Study (Progressive Specialisation): Textile Engineering (G1N)

Disciplinary Domain: Technology

Prerequisites: General entry requirements for university studies.

Subject Area: Textile Technology

Grading Scale: Seven-degree grading scale (A-F)

Content

The aim of the course is to give students basic knowledge about the textile value chain as well as textile materials from fibers to ready-made products through the analysis of processes in a circular flow which is intended to enable nature's resources to be used and recycled without any losses. The introductory lectures highlight various textile quality aspects, with the intention of choosing alternative materials in order to create a "circular product". Thereafter, issues with textile consumption patterns are studied through applied examples from industry.

The course also addresses alternative choices in the product development process in conjunction with ready-made textile products. Sorting and recycling of textile products is presented in the form of ex. digitalization with increased traceability, transparency and resource efficiency in the textile value chain.

Learning Outcomes

After completing the course students will be able, with respect to:

Knowledge and understanding

- 1.1 compare materials within the design process from the material's properties,
- 1.2 discuss the division of responsibility within the textile value chain,
- 1.3 define the need for different types of textile materials based on market demands.

Skills and Abilities

- 2.1 argument the need for changing technical solutions;
- 2.2 discuss and develop proposals for circular business models.

Evaluation ability and approach

- 3.1 discuss ethical aspects of the textile value chain,
- 3.2 question existing consumption patterns of textile products.

Forms of Teaching

The teaching of the course is partly by distance in a combination with lectures on campus and consists of:

- Teaching through text modules and video links
- Filmed lectures with comments
- Workshops
- Seminars

The language of instruction is English.

Forms of Examination

Course is examined through the following examination parts:

- Assignment 1: Written assignment
Learning objectives: 1.1, 3.1
Credits: 2,5
Grading: A-F
- Assignment 2: Report in a group or individually
Learning objectives: 1.1-1.3, 2.1-2.2, 3.1-3.2
Credits 5,0
Grading: A-F

If the student has received a decision/recommendation regarding special pedagogical support from the University of Borås due to disability or special needs, the examiner has the right to make accommodations when it comes to examination. The examiner must, based on the objectives of the course syllabus, determine whether the examination can be adapted in accordance with the decision/recommendation.

Student rights and obligations at examination are in accordance with guidelines and rules for the University of Borås.

Literature and Other Teaching Materials

The course literature is in English.

Hethorn, Janet (2008). *Sustainable fashion: why now? : a conversation about issues, practices, and possibilities*. New York: Fairchild Books & Visuals

Subramanian Senthilkannan Muthu (2019). *Circular Economy in Textiles and Apparel: Processing, Manufacturing, and Design*. Hong Kong: Woodhead publishing

Additional course literature will be informed about at the start of this course and will be available through HB's learning platform.

Student Influence and Evaluation

The course is evaluated in accordance with current guidelines for course evaluations at the University of Borås in which students' views are to be gathered. The course evaluation report is published and returned to participating and prospective students in accordance with the above-mentioned guidelines, and will be taken into consideration in the future development of courses and education programmes. Course coordinators are responsible for ensuring that the evaluations are conducted as described above.

Miscellaneous

This course is primarily given to exchange students.
Previous knowledge in the textile area is an advantage.